REMARKS

Claims 1 to 15 are pending in the present application. Claim 3 has been amended and claim 15 has been added. The change to claim 3 and the new claim 15 are fully supported by the specification, claims and drawings as originally filed.

Reconsideration of the Examiner's decisions and reexamination of this application are respectfully requested.

The §102 rejections:

Claims 1 to 14 have been rejected by the Examiner under 35 USC §102(b) as being anticipated by Allen et al. U.S. Patent 4,810,601, Mimura et al. U.S. Patent 4,751,170, Ito et al. U.S. Patent 5,407,786 or Han DE 43 31 519.

The references cited by the Examiner teach methods of structuring a photoresist layer and underlying substrate employing the steps of coating a layer of resist onto a substrate, exposing the layer through a mask as instantly claimed, applying a silylation reagent, then using the patterned and silylated layer as a mask to etch (using RIE) the underlying substrate to achieve a semiconductor device.

The Examiner, however, is incorrect when the Examiner concludes that these references anticipate Applicants' claims. Applicants submit that the cited references do not anticipate Applicants' invention as the invention of the cited references is quite different from what Applicants are claiming.

Applicants' invention in claim 1 requires (i) "providing a polymerization starter layer...", (ii) applying a radiation field to the polymerization starter layer..., (iii) "applying monomers to the polymerization starter layer...", and (iv) "polymerizing the monomers...".

The Examiner's rejection is quite short and does not explain which elements of Applicants' claims, or their equivalents, are shown in the references. However, it appears as though the Examiner is equating the photoresists of the references with Applicants' polymerization starter layer and the silylation of the references with Applicants' steps of applying monomers/ polymerizing the monomers. It is respectfully submitted that this is erroneous.

The references do not teach a polymerization starter layer. The polymerization starter layer cannot be equivalent to the photoresist since the photoresist is already polymerized (see, for example, Allen et al., col. 6, ll. 52-60). Since the references do not teach a polymerization starter layer, they cannot teach the second step of Applicants' invention of "applying a radiation field to the polymerization starter layer". The references also do not teach applying monomers since the photoresist is a polymer and

the silylation compounds are not monomers. Moreover, there can be no equivalent step in the references of polymerizing the monomers since no monomers are applied in the references.

In view of the foregoing comments, the references are deficient in teaching Applicants' claim 1.

Inasmuch as claims 2 to 12 and new claim 15 depend from claim 1, and since claim 1 is believed to be patentable, then claims 2 to 12 and 15 are believed to be patentable as well.

In addition, at least claims 3, 7, 12 and 15 are believed to be independently patentable as well. As to claim 3, a coating is applied "directly on the substrate for forming of covalent bonds with the polymerization starters." The references do not disclose such a coating.

Claim 7 discloses that the polymerization starter layer is a mono-molecular layer. The references teach photoresist layers many times thicker.

Claim 12 recites that in the step of polymerizing, a varied topography is formed. In the references, a varied topography is formed only after etching, for example, by RIE.

And in claim 15, the starter layer of azomonochlorsilane is recited. The references do not appear to teach such a material.

Accordingly, it is submitted that claims 3, 7, 12 and 15 should be independently patentable.

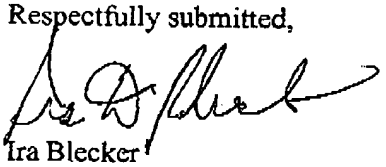
Both of claims 13 and 14 recite that the device has multiple layer topography characterized by a single crystal growth edge. In other words, the multiple layer topography has a complex three dimensional topography without any growth edges other than the surface of the substrate 100. (Applicants' specification [0014] and [0040]). Such a feature is not disclosed in the references. Accordingly, claims 13 and 14 should be allowable as well.

Summary:

In view of all of the preceding remarks, it is submitted that all of claims 1 to 15 are in condition for allowance. If the Examiner finds this application deficient in any respect, the Examiner is invited to telephone the undersigned at the Examiner's earliest convenience.

Applicants' undersigned attorney may be reached by telephone at (845) 894-2580. All correspondence should continue to be directed to the address listed below

Respectfully submitted,



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